T7 Release 9.0

Final Release Notes Eurex

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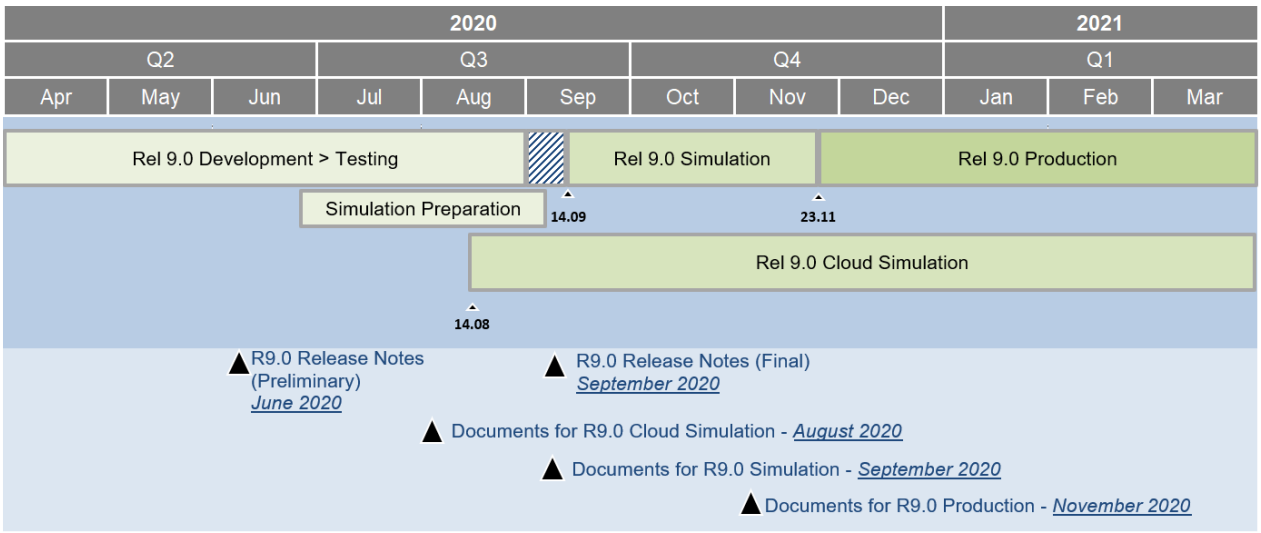
1. Overview T7 Release 9.0

Deutsche Börse AG is planning to launch T7 Release 9.0 on 23 November 2020.

The following diagram gives an overview of the introduction schedule:



Deutsche Börse AG provides a dedicated release simulation environment to give trading participants the opportunity to perform comprehensive testing of their trading applications, independent from the T7 production environment. The simulation period for T7 Release 9.0 is planned to start on 14 September 2020.

In addition to the T7 release simulation, Deutsche Börse AG offers a T7 Release 9.0 Cloud Simulation to allow trading participants and Independent Software Vendors (ISVs) to test against the current T7 production and simulation software versions. In the Cloud Simulation, participants can initiate predefined market scenarios and test specific strategies more easily than in a shared environment. Cloud Simulation is available around the clock for a fixed price per hour and started on 14 August 2020. For more information on the T7 Cloud Simulation, please refer to http://www.eurexchange.com/exchange-en/technology/t7-cloud-simulation.

1.1 New Features and Enhancements Overview

The following new features and enhancements will be introduced with T7 Release 9.0:

- TED spreads
- Basis Trading for Eurex EnLight
- Electronic Processing of TES Reversals
- FIA tag for Execution Source Code (FIX tag 1031)
- Functional Validation of trading capacity
- Compression Service Provision
- New T7 FIX LF Gateway
- Various GUI Changes
- Further Changes and Enhancements

Note on Interfaces

T7 Release 9.0 will provide backwards compatibility for the T7 ETI/FIX interface version 8.1, i.e. participants who do not want to use the new functionality will still be able to connect to T7 with the interface layout version 8.1 even after the production launch of T7 Release 9.0.

Public market and reference data interfaces, including EOBI, EMDI, MDI, RDI/RDF, as well as reports and data files, will not provide backwards compatibility.

Please note for the *Backward Compatibility Mode*, that with T7 release 9.0 new fields in existing messages and new message layouts will be introduced for TES trade reversal and TES compression. These new message layouts will be published with regular sequence numbers in existing broadcast streams even when the client application is running in backward compatibility mode. Client applications running in 8.1 backward compatibility mode will need to take these messages into account (see e.g. their TemplateID) and should discard them after the sequence number check.

This feature has always been a standard in T7 but there were only very few occurrences in previous releases. For reference please find below the respective excerpt from chapter 3.5 of the ETI manual on Backward Compatibility:

> *3.5 Backward Compatibility*
>
> *ETI offers its enhancements with new XML and C-header files for each release. Use of these files can be deferred until the next releases under certain circumstances, because ETI supports the concept of layout level backward compatibility. That means, in case of an application that was built for one of the previous releases, ETI expects and sends the old layouts.*
>
> *New or modified field contents (valid values and/or usage), however, are not suppressed. In certain cases, even layout-level backward compatibility cannot be offered. Enhancements introduced within the new release cannot be used by applications that make use of the backward compatibility facility. Please note that XML and C-header files of the previous releases will not be re-distributed.*
>
> *Therefore, an application using the ETI interface should be able to deal with:*
>
> - *new valid values as field content,*
> - *usage changes of message fields,*
> - *new message layouts in a broadcast stream*.

1.2 Further Reading

The existing documents have been or will be revised for T7 Release 9.0. The following table provides an overview of the schedule for the publication.

T7 Release 9.0	Derivatives	Cash Markets	Combined	Q2 / 2020			Q3 / 2020			Q4 / 2020		
				Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
T7 Release 9.0 - Release Notes	x	x				◆			●			
T7 Functional Reference			x						●			
T7 Functional and Interface Overview			x						●			
T7 Participant Simulation Guide			x						●			
T7 Cross System Traceability			x						●			
T7 Incident Handling Guide			x						●			
T7 Participant and User Maintenance Manual	x	x							●			
Contract Notes Description		x									●	
T7 Known Limitations			x						■		●	
T7 Trader, Admin and Clearer GUI – User Manual	x	x							■		●	
T7 Trader, Admin and Clearer GUI – Installation Manual			x					●				
T7 Enhanced Trading Interface – Manual incl. Header files			x					◆	■		●	
T7 Enhanced Trading Interface- XSD, XML Representation and Layouts			x					◆	■		●	
T7 FIX Gateway – FIX 4.2 and 4.4 Manual incl. Fiximate and Repository			x					◆	■		●	
T7 Market, - Enhanced Order Book- and Reference Data Interfaces Manual incl. Fast Message Template, Repository & FIXML Schema Files			x					◆	■		●	
T7 Extended Market Data Services – Manual incl. Fast Message Template and Underlying Ticker Data			x						■		●	
Cash Market Instrument Reference Data Guide		x							●			
T7 XML Report Reference Manual			x						■		●	
Common Report Engine User Guide			x					●				
N7 Network Access Guide			x						●			
Exchange Rules & Regulations		x									●	
Market Models		x									●	

Release 9.0: ◆ Cloud Simulation / Preliminary Version ■ Simulation Version ● Production / Final Version

Please note that the outlined schedule is subject to change.

The documents will be available on the Eurex Web site www.eurexchange.com under the link:

> Technology > T7 Trading Architecture > System Documentation > Release 9.0.

1.3 Contacts

If you have any questions or require further information, please contact your Global Key Account Manager Trading. Alternatively, please contact your Technical Key Account Manager using your VIP number or via e-mail to cts@deutsche-boerse.com.

1.4 Definitions and Abbreviations

Term / Abbreviation	Description
BTRF	Basket Total Return Futures
DBAG	Deutsche Börse AG
EMDI	T7 Enhanced price level aggregated Market Data Interface
EOBI	T7 Enhanced Order Book Market Data Interface
ETI	T7 Enhanced Trading Interface
ETRF	Equity Total Return Futures
Eurex EnLight	Eurex EnLight is a price discovery service offered by Eurex on the T7 platform to negotiate TES transactions electronically
FIA	Futures Industry Association
FIX	Financial Information eXchange (protocol)
GUI	Graphical User Interface
LF	Low Frequency
MDI	T7 netted price level aggregated Market Data Interface
OVS	Options Volatility Strategy
RDF	T7 Reference Data File
RDI	T7 Reference Data Interface
RfQ	Request for Quote
T7	T7 is the trading architecture developed by Deutsche Börse Group
TES	T7 Entry Service
TRR	Trade-to-Request Ratio

2. TED Spreads

After the start of T7 Release 9.0, a new type of inter-product spread (IPS) will be introduced denoted as *TED spread*. Historically, a *TED spread* denoted the difference between futures contracts which relate on one side to the futures contract on a short-term US government debt (T-Bills) and on futures contracts which relate to interbank loans on the other side, where the maturity of the government debt approximately corresponds to the combined terms to maturity for the interest rates of the interbank loans. In this historical sense, the abbreviation TED means *Treasury Bill Eurodollar Difference*.

In T7, TED spreads will combine contracts of two products which have an interest rate sensitive underlying, but the involved interest rates refer to different types of borrowers, public borrowers versus private borrowers.

2.1 Functional Description

For TED spreads in T7, one leg will refer to a fixed income futures contract with an underlying bond. The other leg will refer to several consecutive short-term interest futures contracts. The time span covered by the consecutive short-term interest futures will be approximately identical to the remaining maturity of the underlying bond at the point in time when the corresponding fixed income futures leg will expire.

As a first step, the TED spread between Schatz and Euribor futures involving a 2-year bundle on the short-term interest rate side (FGBS-FEU3 TED spread) is planned to be introduced after the launch of T7 Release 9.0. Other TED spreads may follow. The concrete activation date of the FGBS-FEU3 TED spread will be published in a separate circular.

2.1.1 General Concept

The signature of a TED spread product will be as follows.

- Leg 1 – "Fixed Income Leg": simple instrument of fixed income futures with expiry T and a buy/sell indicator identical to "buy"; the leg ratio will be denoted by R^{FI}.
- Leg 2 – "Short-Term Interest Rate Leg": multi-leg instrument (bundle) of a short-term interest rate futures contract starting with the same expiration month of the fixed income expiry T and a buy/sell indicator identical to "sell"; the leg ratio will be denoted by R^{ST}; it is assumed that the first instrument of the short-term leg (i.e. the first leg of the bundle) will expire after the fixed income leg.

In case of a FGBS – FEU3 TED spread, a 2-year bundle will be used on the short-term interest rate side as the multi-leg instrument.

Trading in a TED spread instrument will be terminated on the first business day where the position limits become effective for the fixed income leg instrument, i.e. three trading days prior to the last trading day of the fixed income leg instrument. Consequently, the TED spread instrument will be de-activated three business days prior to the expiration of the fixed income leg.

As an example, the FGBS – FEU3 TED spread product valid in July / August 2020 contains the following TED spreads instruments:

Expiry	Leg 1: FGBS, simple inst leg ratio $R^{FI} > 1$	Leg 2: FEU3, 2-yr Bundle Leg; leg ratio $R^{ST} = 1$	Last Trading Day
Sep 2020	FGBS Sep20; expiry date: 08.09.2020	Sep20, Dec20, Mar21, Jun21, Sep21, Dec21, Mar22, Jun22	03.09.2020

A new TED spread instrument will be created shortly before the fixed interest rate leg instrument expires and before the last trading day of the active TED spread instrument is reached. As an example, the following Dec 2020 TED spread instrument is created to succeed the Sep 2020 TED spread instrument mentioned above. Its creation day is assumed to be five business days before the fixed interest leg of the active TED spread instrument expires:

Expiry	Leg 1: FGBS, simple inst leg ratio $\boldsymbol{R^{FI} > 1}$	Leg 2: FEU3, 2-yr Bundle Leg; leg ratio $\boldsymbol{R^{ST} = 1}$	First / Last Trading Day
Dec 2020	FGBS Dec20; expiry date: 08.12.2020	Dec20, Mar21, Jun21, Sep21, Dec21, Mar22, Jun22, Sep22	01.09.2020 / 03.12.2020

2.1.2 Leg Ratios

The valuation of the TED spreads will be based on the DV01 approach which also determines the leg ratios of the fixed income and short-term interest rate leg of the TED spread.

The leg ratio R^{FI} of the fixed income side is calculated by the following equation:

$$R^{FI} \quad = \quad ROUND\left(R^{ST} \cdot \frac{FN^{ST}}{FN^{FI}} \cdot \frac{\mathrm{m}}{ForModD^{FI}}\right) \tag{1}$$

The function $ROUND$ will be introduced to ensure an integer value of the leg ratio R^{FI}.

Based on equation (1), the following TED spread instrument parameters have to be known upfront:

- leg ratio R^{ST} of the short-term interest side which is assumed to be $R^{ST} = 1$
- future notional FN^{ST} of the short-term interest rate leg; for FEU3, $FN^{ST} = 1\,000\,000\,EUR$
- future notional FN^{FI} of the fixed income leg; for FGBS, $FN^{FI} = 100\,000\,EUR$
- forward modified duration $ForModD^{FI}$ of the fixed income leg
- time span in number of years m covered by the short-term interest rate leg; for the FGBS – FEU3 TED spread, $m = 2$.

The forward modified duration $ForModD^{FI}$ of the fixed income leg will refer to the CTD bond in the basket of the corresponding fixed income futures and is given by the following generic equation

$$ForModD^{FI} \quad = \quad \frac{\left(\sum_{l=1}^{m} \frac{CF_l \cdot t_l}{(1+y_{CTD})^{t_l}}\right)}{PV_{forw}} = \frac{\left(\sum_{l=1}^{m} \frac{CF_l \cdot t_l}{(1+y_{CTD})^{t_l}}\right)}{prc^{FI} \cdot CV} \tag{2}$$

with

- m: number of cash flows of the CTD at the expiration day of the corresponding fixed income futures instrument
- CF_l for $l = 1, \ldots, m$: bond cash flow
- $t_l, l = 1, \ldots, m$: bond cash flow period on the expiration day of the corresponding fixed income futures
- y_{CTD}: the yield y_{CTD} resulting from the CTD bond forward price
- PV_{forw}: forward price of the corresponding fixed income futures
- CV: conversion factor of the corresponding fixed income futures

The forward price PV_{forw} will be given by $PV_{forw} = prc^{FI} \cdot CV$ with the price prc^{FI} and the conversion factor CV of the corresponding fixed income futures.

Taking a FGBS – FEU3 TED spread as an example, typical values of the leg ratio R^{FI} of the fixed income leg will be 10 or 11.

In case of a change of the leg ratio R^{FI} as defined by equation (1) because of a change in the forward modified duration $ForModD^{FI}$, a new TED spread instrument with a changed leg ratio R^{FI} will be created in the T7 trading platform on short notice and will be available for trading in parallel to the already existing TED spread instrument with the unchanged leg ratio.

2.1.3 Pricing and Price Decomposition

The following pricing convention will be applied to the price prc^{TED} of a TED spread instrument:

$$prc^{TED} = \left({R^{FI}}/{n}\right) \cdot \left(prc^{FI} - prc^{FI_Sttl}\right) - \left({R^{ST}}/{n}\right) \cdot \left(\sum_{i=1}^{n}\left(prc_i^{ST} - prc_i^{ST_Sttl}\right)\right) \qquad (3)$$

where the following terminology will be used:

- prc^{FI}: leg trade price of the fixed income futures
- prc^{FI_Sttl}: settlement price of the fixed income futures of the previous business day
- R^{FI}: leg ratio of fixed income futures leg as calculated by equation (1)
- prc_i^{ST}: leg trade price of the i-th short-term interest rate futures with $i = 1, \dots, n$
- $prc_i^{ST_Sttl}$: settlement price of the i-th short-term interest rate futures of the previous business day with $i = 1, \dots, n$
- R^{ST}: leg ratio of short-term interest rate side
- n: number of the consecutive short-term interest rate contracts involved in the corresponding TED spread; usually the relation will be $n = 4 \cdot m$ with the number of years m covering the time span of the consecutive short-term interest rate futures legs.

In case of a FGBS – FEU3 TED spread, it will be $n = 8$.

Please note that the price leg ratios $\left({R^{FI}}/{n}\right)$ and $\left({R^{ST}}/{n}\right)$ will assume non-integer values and that the quantity leg ratios R^{FI} and R^{ST} will always be given by integer values. Both aspects will be considered in the price decomposition of a TED spread trade.

The TED spread pricing convention will be based on the difference between the averaged net price change of the fixed income futures and the averaged net price change of the short-term interest rate leg futures involved in the corresponding TED spread instrument. The second term of equation (3) is equivalent to the “averaged net change pricing” approach commonly applied for the pricing of packs and bundles in the short-term interest rate area. With the definition of the price prc_{m-yr}^{bundle} valid for a m-year bundle (which is also known by the T7 Trading Platform), it is

$$prc_{m-yr}^{bundle} = \left({1}/{n}\right) \cdot \left(\sum_{i=1}^{n}\left(prc_i^{ST} - prc_i^{ST_Sttl}\right)\right)$$

Thus, equation (3) can be rewritten by

$$prc^{TED} = \left({R^{FI}}/{n}\right) \cdot \left(prc^{FI} - prc^{FI_Sttl}\right) - R^{ST} \cdot prc_{m-yr}^{bundle} \qquad (4)$$

A TED spread trade will be decomposed first into the leg trade price of the fixed income leg and into the leg trade price of the bundle leg. Afterwards, a decomposition of the bundle price into leg trade prices of the involved short-term contracts will be performed. Since the pricing of the bundle in the

TED spread will be equivalent to the pricing of a stand-alone bundle, the existing pack and bundle price decomposition of the T7 Trading Platform will be used.

To ensure transparency on the leg level, a new instrument subtype will be introduced referring to the TED spread as a specific subtype of the instrument type IPS. The new instrument subtype will be applied to all leg trades resulting from a TED spread trade. Consequently, it will be possible to distinguish in the short-term interest rate futures between leg trades resulting from a TED spread IPS trade and those resulting from a bundle trade.

Please note that in accordance with equation (3), the leg trade prices on simple instrument level resulting from a TED spread trade decomposition will exactly reproduce the traded TED spread price.

2.2 Impact on Interfaces

The following chapter outlines the changes to interfaces to support the functionality. The changes are described in a general fashion to provide an indication of the upcoming amendments. For detailed changes, please refer to the upcoming interface manuals and to the *Online Help* in the GUIs.

2.2.1 Trader GUI

The *Order Entry* view will be enhanced to support the entry and maintenance of TED Spread instrument orders. Traders shall prefill the *Order Entry* view from the *Market* view in order to select a TED Spread instrument. Direct selection of a TED Spread from within the *Order Entry* view without a selection from the *Market* view will not be possible.

Once the *Order Entry* view has been prefilled with a TED Spread, there will be two rows of instruments in the *Contract Chooser* and a Strip-like expiry selection area below:

- The first row represents the fixed income futures.
- The second row represents the first of the short-term interest rate futures.
- The Strip-like expiry selection indicates all short-term interest rate futures that are part of this complex instrument.

They will not be editable by the user.

2.2.2 Other interfaces

There will be no impact on any other interface. New *TED spread* instrument subtypes will be communicated as usual in the *instrument subtypes* CSV file within the *product and instruments files* on the Eurex Web site, see *Data* > *Trading files* > *Product parameters files*

3. Basis Trading for Eurex EnLight

With T7 Release 9.0, Eurex will introduce the Eurex EnLight Basis Trade Functionality.

3.1 Functional Description

The new functionality will allow a negotiation workflow for outright futures trading. The goal will be to reduce the underlying execution risk of respondents as the negotiation will only be around the basis between the underlying and the futures. The negotiation of the underlying risk will be continued after a deal of the basis has been agreed and has been transferred to the requester. Respondents will be able to update the futures quantity but cannot go beyond the deal quantity.

Hence, respondents will be able to update the reference price while working on the deal. Once the deal has been finalised, a regular outright EnLight TES trade will be executed.

The Eurex EnLight Basis Trade Functionality will be available only for the indicative workflow. Additionally, deals at a synthetic Half Tick will be supported.

The new Eurex EnLight Basis Trade workflow will work as follows:

1. The requester initiates the negotiation with setting the Basis Trade identifier and may provide a preferred reference price while initiating the RfQ.
2. The respondent can answer to the RfQ by sending a quote with reference price (mandatory), Basis bid, Basis ask, bid quantity, ask quantity.
3. Eurex EnLight calculates the bid and ask price based on the reference price and Basis bid / Basis ask prices where the delta is fixed to 100%. These fields are non-editable by the users.
4. The requester can enter a HitQuote and may also provide a *Reference Price Limit* similar to *Working Delta*.
5. In working mode (deal status *Working*), the respondent may provide the following:
    a. New reference price.
    b. New futures quantity.
6. Eurex EnLight calculates the new futures price based on the reference price:
    New future price = New reference price + basis
7. The respondent can set the deal status to one of the following, while updating the deal:
    a. *Pending* to *Working* – Deal in working status.
    b. *Pending* to *Reject* – Respondent can reject the working deal.
    c. *Pending* to *Approve* – Deal finalized with futures quantity, futures price.
    d. *Working* to *Approve* – Deal finalized with adjusted futures quantity, new futures price.

Like in other workflows the requester and the respondent are able to chat during the negotiation. It will also be possible to respond on-behalf.

3.2 Impact on Interfaces

The following chapter outlines the changes to interfaces to support the functionality. The changes are described in a general fashion to provide an indication of the upcoming amendments. For detailed changes, please refer to the upcoming interface manuals and to the *Online Help* in the GUIs.

3.2.1 ETI

There will be the following new field

- *QuoteRefPrice* (28759)

in the following messages:

- *SRQSOpenNegotiationRequest*
- *SRQSOpenNegotiationNotification for Requester and for Respondent*
- *SRQSUpdateNegotiationRequest*
- *SRQSNegotiationNotification for Requester and for Respondent*
- *SRQSEnterQuoteRequest*
- *SRQSQuoteNotification for Respondent*

The following new field will be provided:

- *QuoteRefPriceSource* (28760),
  with the valid values 1=Underlying, 2=Custom underlying price, 3=ReferencePrice

in the following messages:

- *SRQSOpenNegotiationRequest*
- *SRQSOpenNegotiationNotification for Requester and for Respondent*
- *SRQSUpdateNegotiationRequest*
- *SRQSNegotiationNotification for Requester and for Respondent*

The new valid value 2=*BasisTrade* will be added to the existing field:

- *QuoteSubType* (538)

The new field HedgingInstruction (30059) will be added to the following messages:

- SRQS Create Deal Notification (10708)
- SRQS Hit Quote Request (10704)

3.2.2 Trader GUI

Some of the following elements will only be visible in the context of Eurex EnLight Basis trading.

Eurex EnLight Quote Entry view:

- New fields *BasisBid* and *BasisAsk*.
- *Bid* and *Ask* will be automatically calculated from BasisBid/BasisAsk plus reference price.

Eurex EnLight Request Details view:

- New checkbox *Basistrade* next to the *Working Delta* checkbox. This checkbox will only be visible if a futures contract is selected.
- New columns *BasisBid* (calculated), *BasisAsk* (calculated), *RefPrc*.

Eurex EnLight Overview Tables view:

- Display fields for *BasisBid, BasisAsk, Basistrade indication, RefPrc*.

Deal Entry view:

- New flag *OnClose*.

Deals view:

- New columns *NewFutPrc*, *Onclose*.
- Column *NewOptQty* renamed to *NewQty*

3.2.3 XML Reports

TE600, TE610:

- New fields *basisFlag, newFuturePrc, futureQty*.

TE600 only:

- New fields *basisBid, basisAsk*.

4. Electronic Processing of TES Reversals Requests

With T7 Release 9.0, the TES workflow will be extended to cover the electronic reversal requests of TES trades. The initiator of a TES trade will be enabled to trigger the reversal.

4.1 Functional Description

The initiator of the TES trade is the only person within the TES workflow who knows all the counterparties of the TES trade, while each approver of a TES trade sees the initiator but does not see any other counterparty. In case a counterparty wants to reverse the TES trade, instead of contacting Eurex Market Operations, the counterparty will contact the initiator of the TES trade and will ask him to trigger the TES trade reversal.

Only the initiator of the TES trade will be able to trigger the reversal of the corresponding TES trade. Each counterparty of the TES trade will have to approve the reversal of its TES trade side.

Similar to the TES workflow for creating a TES trade, the initiator will be informed about the change of TES trade status and TES Trade side status and hence will have the overview over the complete TES workflow. Consequently, the initiator will see the status of each TES trade side whether the counterparty has approved the reversal or not. If required, the initiator may contact a specific counterparty outside of the T7 trading platform.

Once the reversal request for each TES trade side has been approved, Eurex Market Operations will have to approve the reversal of the TES trade. After the reversal of the TES trades have been approved by Eurex Market Operations, the corresponding TES trade including all TES trade sides will be reversed.

The electronic TES trade reversal applies to simple and complex instruments. For TES trades in complex instruments all related TES deals on leg instrument level will be automatically reversed.

Electronic TES trade reversal will be available for almost all the TES types supported for TES trading at Eurex. Electronic TES trade reversal will not be available for basket TES trades and for Compression TES trades (see chapter 7 in this document).

Please note that the existing process of manual TES trade reversal performed by Eurex Market Operations will be kept.

4.2 Impact on Interfaces

The following chapter outlines the changes to interfaces to support the functionality. The changes are described in a general fashion to provide an indication of the upcoming amendments. For detailed changes, please refer to the upcoming interface manuals and to the *Online Help* in the GUIs.

4.2.1 ETI

There will be new messages:

- *ReverseTESTradeRequest (10630)*
- *TESReversalBroadcast (10632)*
- *ApproveReverseTESTradeRequest (10631)*

There will be new fields in the above new messages and in one existing message:

- *ReversalCancellationReason (25195)*, with valid values:
  1=TES Activity State Change
  2=Instrument Expiration
  3=Instrument Deletion
  4=Instrument Suspension.
- *ReversalReasonText (25196)*
- *ReversalInitiationTime (25197)*
- *ReversalApprovalTime (25198)*
- *ReversalIndicator (700)*, added to the existing message *TESTradeBroadcast* (10614)

The following new valid values will be added to the field *TradeAllocStatus* (1840):

7=Pending Reversal

8=Side Approved Reversal

9=Reversed

10=Cancelled Reversal

Please note for the *Backward Compatibility Mode*, that with T7 release 9.0 new fields in existing messages and new message layouts will be introduced for TES trade reversal. These new message layouts will be published with regular sequence numbers in existing broadcast streams even when the client application is running in backward compatibility mode. Client applications running in 8.1 backward compatibility mode will need to take these messages into account. For more information see the *Note on Interfaces* in chapter 1.1.

4.2.2 FIX

There will be one new field in the message *TradeCaptureReport*:

- *ReversalIndicator*

4.2.3 Trader GUI

TES Entry view:

There will be two new buttons:

- *Reverse* button: To initiate a TES trade reversal. The button will be enabled only for the initiator of the TES trade and only if the TES trade is already executed. The initiation of a reversal will have to be confirmed in a pop-up view.
- *Approve Reversal* button: To approve all TES trade sides of a TES trade at once. The button will be available only for the counterparties, not for the initiator. There will be no confirmation of the approval in a pop-up view.

TES view:

There will be a series of new columns to reflect the TES trade reversal process:

- ReversalTextReason
- ReversalInitiationTime
- CancellationReason
- ReversalInitiator
- ReversalApprover

- ReversalApprovedbyMS

Reversal Alert:

If a TES reversal is initiated, all counterparties will receive an audio alert and a notification view will pop up. The new alert will be configured to be active by default.

4.2.4 XML Reports

There will be new fields in the following reports:

TE545 Daily TES Maintenance:

- *RevInitTime*: This field will contain the time when the TES trade reversal was initiated.
- *RevAppTime*: This field will contain the time when an approval was performed.
- *RevReason*: This field will contain the reversal reason provided by the initiator.

TE810 T7 Daily Trade Confirmation:

- *RevRequested*: This field will indicate whether a reversal was requested electronically.

There will be new valid values for the following fields:

tesActivity:

- 9 REN TES Reversal Entry
- 10 RAP TES Reversal Approval
- 11 REV TES Reversal Approval by Market Supervision

sideStatus:

- 6 RPE Reversal is Pending
- 7 RAP Reversal is Approved
- 8 REV Reversed

5. FIA tag for Execution Source Code (FIX tag 1031)

With the introduction of T7 Release 9.0, Eurex will be requesting its trading participants to tag orders or TES trades submitted with trading capacity *Agency* with the *Execution Source Code* as defined by the *Futures Industry Association* (FIA) using the existing *custOrderHandlingInst* respective *RateID* fields (FIX tag 1031). If no tag is provided, a default value will automatically be applied.

5.1 Functional Description

FIA developed the simplified *Execution Source Code Schema* (also known as *Rate Identifier*) in order to improve the efficiency in the billing process for all members as well as for *Atlantis* users. This identifier allows the clear tagging of the execution method used for trades in *Exchange Traded Derivative* at its point of origin. This will enable any executing and clearing broker to reference the appropriate brokerage rate easily in relation to the respective execution method used. The *Execution Source Code* can be entered via the Eurex T7 trading platform and is subsequently reported via Eurex Clearing.

With the introduction of T7 Release 9.0, the entry of the *Execution Source Code* will be mandatory in case of *Agency* business execution (trading capacity A) according to valid values as specified by FIA (see table). If no value for the *Execution Source Code* is entered to an on-book order or TES approval, the order respective TES trade will not be rejected but a default value (D) for the *Execution Source Code* will be added automatically instead. In case an invalid value is entered, the order respective TES trade will be rejected.

The following table shows the valid values of the *Execution Source Code* as set by FIA:

Value	Description
W	Desk
Y	Electronic
C	Vendor-provided Platform billed by Execution Broker
G	Sponsored Access via Exchange API or FIX provided by Execution Broker
H	Premium Algorithmic Trading Provider billed by Execution Broker
D	Other, including Other-provided Screen; Default

Please be aware that Eurex does not allow trading participants to offer Sponsored Access for clients.

5.2 Impact on Interfaces

The following chapter outlines the changes to interfaces to support the functionality. The changes are described in a general fashion to provide an indication of the upcoming amendments. For detailed changes, please refer to the upcoming interface manuals and to the *Online Help* in the GUIs.

5.2.1 ETI

The field *custOrderHandlingInst (1031)*, will be adjusted to the functional description given above.

The description will be:

> Identifies the source of an order, in accordance with the FIA guidelines for a rate Identifier.
>
> The field is for participant use only.

The valid values will be:

W=Desk

Y=Electronic

C= Vendor-provided Platform billed by Execution Broker

G=Sponsored Access via Exchange API or FIX provided by Execution Broker

H=Premium Algorithmic Trading Provider billed by Execution Broker

D=Other, including Other-provided Screen; Default

5.2.2 FIX

The field *custOrderHandlingInst (1031)* will be adjusted in the same way.

5.2.3 GUI

The field *RateID* (corresponds to FIX tag 1031) will be adjusted in the same way.

6. Functional Validation of Trading Capacity

With the introduction of T7 Release 9.0, Eurex will put in place a new validation for the usage of trading capacity *Agency* with respect to the *client service authorization* of the corresponding trading participant.

6.1 Functional Description

In case a trading participant provides client services in regulated markets ("*client service authorization*"), Eurex requires an authorization of regulated activities obtained from the participant's national authority. It is also required to indicate corresponding trading transactions with the trading capacity *Agency* (ETI field *TradingCapacity*, tag 1815).

In accordance with the Trading Conditions, a new validation will verify whether the usage of the trading capacity with *Agency* is compliant with the *client service authorization* of the corresponding trading participant. As a consequence, any on-book or TES trading transaction requiring the specification of the trading capacity (e.g. on-book order add, TES trade approval) will be rejected in case a trader is using the trading capacity with valid value *Agency* but the business unit he belongs to is not compliant with the client service authorization.

The new functional validation of the T7 trading capacity will be in line with a new consistency check between trading capacity and clearing account (ETI field *Account*, tag 1) performed by the C7 clearing platform. An on-book or off-book trade created on the T7 trading platform and transferred to C7 for clearing will be subject to the *trading capacity versus clearing account* consistency check. In case the clearing account is not consistent with the trading capacity, the clearing account provided by the trader will be replaced by the default clearing account of the corresponding trading capacity.

The validation scheme can be summarized as follows:

Order		Clearing Account		
EEX / Eurex		A1 - A9	P1 / P2	M1 / M2
Trading Capacity	Agency	o.k.	A1	A1
	Proprietary	P1	o.k.	o.k.
	Market Maker	M1	o.k.	o.k.

Figure 1: Validation Scheme

As an example, the combination trading capacity identical to *Proprietary* and clearing account identical to *M2* will be accepted as a valid combination and the combination trading capacity identical to *Agency* and clearing account identical to *P1* will be regarded as inconsistent. In the latter case, the clearing account *P1* will be replaced by *A1* which is the default clearing account of the trading capacity *Agency*.

The validation scheme of Figure 1 will apply to trades resulting from the on-book order execution and TES trade approval and will supplement the similar and existing validation scheme applied to on-book quote execution. Please note that the trading capacity of quotes is always identical to *Market Maker* by default and the valid accounts for the trading capacity *Market Maker* referring to quotes are *M1 and M2*.

6.2 Change in XML Report TE810 T7 Daily Trade Confirmation

The report *TE810 T7 Daily Trade Confirmation* will be enhanced to include a new field denoted by *Clearing account* supplementing the already existing field *Account*. The field *Account* will contain the

account information provided by the trader entering the on-book or off-book transaction and the field *Clearing account* will contain the account information applied in the downstream clearing system. In case the account information was correctly provided by the entering trader, both fields will contain the same value. In case the account information was not correctly provided by the entering trader due to the use of wrong or inconsistent values, the fields will differ from each other. Thus, as a general feature, the comparison of the fields *Account* and *Clearing account* in the end-of-day report TE810 will reveal whether the account information provided by the trader was correct or whether an adaptation of the account information was performed by the exchange.

7. Compression Service Provision

After the introduction of T7 Release 9.0, Eurex will provide the possibility for external compression service providers to offer exchange traded derivatives compress services in the Eurex market.

7.1 Functional Description

7.1.1 General Concept

Capital efficiency is and will remain an important topic for derivatives markets in the foreseeable future. The current and future regulation on capital requirements poses a continuous challenge to Eurex participants, impacting their trading activities at Eurex. Higher costs on derivatives positions is impacting and will impact traded volumes at Eurex. While it is expected that the upcoming regulation will ease the capital requirements, the focus for regulators is still on risk reduction.

Beside from simple close-out transactions, an important method to reduce the capital requirements resulting from derivatives positions is compression. Compression services are already established in the OTC market for other asset classes, especially for interest rate swaps.

Several compression service providers already offer their compression services in the OTC market. Eurex is aiming to set up a compression service infrastructure allowing external compression service providers to offer exchange traded derivatives compression services in the Eurex market.

7.1.2 External requirements for using the Compression Service at Eurex

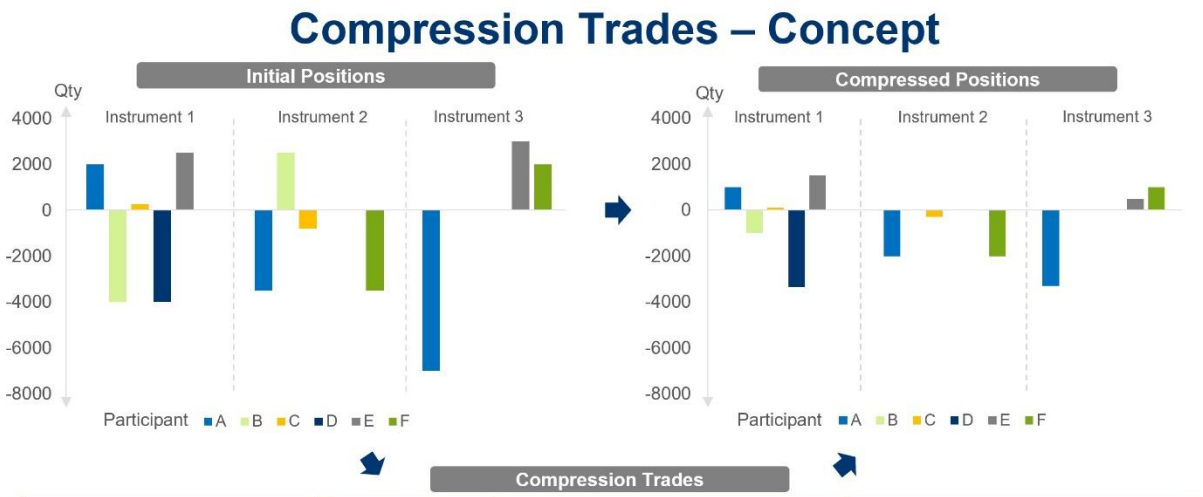
The usage of the compression service at Eurex will be based on the following activities taking place outside the Eurex exchange environment:

- Creation of initial open positions:
  Participants intending to use a compression service facilitated by Eurex will have a strong focus on reducing open positions. To join a compression run organized by a compression service provider, participants are required to accumulate open positions across different trading desks on product and instrument level resulting to one net initial open position per instrument.

- Interaction between compression service provider and trading participants:
  The trading participant is providing the initial open position to the compression service provider. The required interaction between a trading participant and a compression service provider will take place outside of the Eurex exchange environment.

- Creation of compression trades by external compression service provider:
  Based on the initial open position of the trading participants joining a compression run, the external compression service provider will create compression trades which may be regarded as a vehicle transforming the set of initial open positions into a set of compressed open positions by preserving selected key risk figures. The creation of compression trades will be performed outside the Eurex exchange environment.

After these preconditions have been met, the compression service provider will be able to start the compression run in the exchange environment of Eurex.



Instruments	Trade Details (Qty @ Price)	Buy Side						Sell Side					
		A	B	C	D	E	F	A	B	C	D	E	F
Instrument 1	2150 @ 12.7	0	1500	0	650	0	0	1000	0	150	0	1000	0
Instrument 2	3000 @ 13.5	1000	0	500	0	0	1500	0	3000	0	0	0	0
Instrument 3	3700 @ 11.3	3700	0	0	0	0	0	0	200	0	0	2500	1000
…	….												
Instrument N	…												

Diagram ***Compression Trades – Concept***: Based on the initial positions provided by the participants joining a compression run, the compression trades created by the compression service provider are transferring the initial positions into compressed positions. This example involves six participants (A to F) with initial positions in three different instruments (1 to 3).

7.1.3 Compression Service provision set-up features

A new TES type denoted as *Compression* will be introduced to properly distinguish the TES trades with regulatory required minimum quantity thresholds and compression trades which will be exempted from the usual regulatory minimum quantity requirements.

The compression service provision at Eurex will consider two different types of participants with corresponding users:

- Compression service provider:
  A Eurex participant (not necessarily a Eurex trading participant) who will be allowed to submit predefined compression trades in the broker mode. As already mentioned in the previous subsection, the predefined compression trades will be created outside the Eurex exchange environment.
  A new trading role denoted as *TES Compression Service* will be introduced complementing the existing entitlement procedures. The role will only be granted to compression service providers by Eurex on request.

- Compression service user:
  The compression service user is a Eurex trading participant who will approve the compression trade sides of a compression run which he is involved in. By approving the compression trade sides, the compression service user will also give consent to the results of the compression run and to the compressed open position resulting from the impact of the compression trades. The compression trade approval will be supported by the existing approval entitlement of the

T7 trading platform. Particularly, a compression service user envisaged for the approval of compression trades will require the TES type eligibility *Compression* (please refer to the User Maintenance screen of the T7 Admin GUI).

The Eurex compression service infrastructure will be provided on the product level, i.e. the compression service will only be supported for selected products specified by Eurex (“allowed products”). The allowed products for compression service provision will be indicated in the TES profile published via the *TES parameters* CSV files on the Eurex Web page, see

Data > Trading files > T7 Entry Service parameters

7.1.4 Compression trade processing

The processing of a compression run in the T7 trading platform will consist of three different steps:

7.1.4.1 Compression trade upload by the Compression Service provider

The set of compression trades created outside the Eurex exchange environment will constitute a compression run. The compression trades in an allowed product will be uploaded to the T7 trading platform. Compression trades will always be uploaded by the compression service provider as multi-lateral TES trades indicated by the TES type *Compression*. The usual TES trade entry request of the electronic Eurex ETI interface is used in *broker mode* (which is also denoted as multi-lateral trade registration functionality, MTR).

Trading participants joining a compression run will be included as counterparties on the buy or on the sell side of a multi-lateral compression trade. Only one compression trade per instrument of the allowed product will be supported.

It will be in the responsibility of the compression service provider to ensure the completeness and the timeliness of the compression run entry to the T7 trading platform. The compression service provider will also be responsible for determining the trade price of the individual compression trades.

7.1.4.2 Compression trade approval by Compression Service users

After the successful upload of compression trades by the compression service provider to the T7 trading platform, all trading participants joining the compression run will be requested to approve all their compression trade sides they are involved in to successfully process the compression run in the Eurex exchange environment.

Compression trade approval will be supported in the usual way either via the corresponding approval request of the electronic Eurex ETI interface or via the T7 Trader GUI. The mass approval of all compression trade sides a trader is involved in will be supported by the T7 Trader GUI.

As for any TES trade handled via the T7 trading platform, the anonymity of the approving compression user will be preserved, and the compression service provider will be displayed as counterparty to the compression service users in the T7 Trader GUI.

Please note that compression trades are subject to the TSL validation for off-book trading but do not contribute to the off-book pre-trade risk limits.

7.1.4.3 Release of Compression run by Compression Service provider

After the approval of all compression trade sides by all trading participants joining the compression run has been successfully performed, the compression service provider will release the compression run.

In case, one or more compression trade sides have not been approved by one or more trading participants joining the compression run, the request to release the compression run will be rejected.

Consequently, a compression run will either be completely released for further processing in the downstream Eurex clearing and risk management systems or the whole compression run will be dismissed. In the last-mentioned case, no compression trade will be transferred to the Eurex clearing and risk management systems independent of the approval status of the individual compression trades of the compression run.

It will be the responsibility of the compression service provider to ensure the timely release of the compression run. After the successful release of the compression run, all compression trades of the compression run will be transferred to the Eurex C7 clearing platform for further processing.

7.2 Impact on Interfaces

The following chapter outlines the changes to interfaces to support the functionality. The changes are described in a general fashion to provide an indication of the upcoming amendments. For detailed changes, please refer to the upcoming interface manuals and to the *Online Help* in the GUIs.

7.2.1 ETI

There will be the following new messages:

- *TES Compression Run Status Request* (10616)
- *TES Compression Run Status Response* (10617)
- *TES Compression Run Status Broadcast* (10618)

There will be the following new field:

- *CompressionID* (25191)

added to the following messages:

- *Approve TES Trade Request* (10603)
- *Delete TES Trade Request* (10602)
- *Enter TES Trade Request* (10600)
- *Modify TES Trade Request* (10601)
- *Approve TES Trade Broadcast* (10607)
- *TES Broadcast* (10604)
- *Delete TES Trade Broadcast* (10606)
- *TES Execution Broadcast* (10610)
- *TES Trade Broadcast* (10614)
- *TES Trade Upload Broadcast* (10613)
- *Upload TES Trade Request* (10612)

The following valid values have been added to the following fields:

- TrdType (828):
  - 50 Compression
- TradeReportType (856) in TESBroadcast:
  - 2 Accept
- DeleteReason (285):
  - 110 Compression cancelled by service provider
  - 111 Compression cancelled by system

Please note for the *Backward Compatibility Mode*, that with T7 release 9.0 new fields in existing messages and new message layouts will be introduced for TES compression. These new message layouts will be published with regular sequence numbers in existing broadcast streams even when the client application is running in backward compatibility mode. Client applications running in 8.1 backward compatibility mode will need to take these messages into account. For more information see the *Note on Interfaces* in chapter 1.1.

7.2.2 Reference Data

The allowed products for compression service provision will be indicated in the TES profile published via the static *TES parameters* CSV files on the Eurex Web page, see

Data > Trading Files > T7 Entry Service parameters > TES parameters

7.2.3 Trader GUI

A new *TES Compression* view will be introduced. Here, the *compression service provider* will be able to initiate, maintain and monitor compression runs.

In the existing *TES* view, the *compression service provider* will be able to enter the related TES compression trades. The counterparties will be able to approve the TES compression trade in the existing *TES* view, either manually or by using the *Upload Compression Approvals* feature of the TES view.

7.2.4 XML Reports

A new report *TE548 Daily Compression Run Maintenance* will be provided for the compression service provider to reflect the life cycle of compression runs.

8. New T7 FIX LF Gateway

As part of Release 9.0, Deutsche Börse AG will start an initiative to integrate the FIX gateway closer into the T7 architecture. This new customer interface, using the FIX 4.4 Protocol, will be offered in parallel to the existing FIX interface and will, after a transition period, replace the existing interface.

As initial step, Deutsche Börse AG will introduce new T7 FIX Low Frequency (LF) Gateways for back-office sessions in Q1 2021. A detailed timeline and further information will be provided with sufficient lead time.

9. Various GUI changes

9.1 Enhanced maintenance of Text Field configuration

The maintenance and deletion of shared *Text Field Configuration* entries respective shared profiles will be adapted as follows:

- All Head Traders will be able to maintain *Group Shared* entries of their group.
- All Supervisors will be able to maintain *BU Shared* entries.

Thus, it will be possible to maintain and delete *Text Field Configuration* entries respective profiles of users who have already been removed from the system.

9.2 Eurex EnLight TRR Threshold list

In all GUI views, the *Eurex EnLight Blacklist* will be renamed to *Eurex EnLight TRR Threshold List*.

9.3 Upload possibility for TES Trades in Futures calendar spreads

With T7 Release 9.0, the *TES Blocktrade Import* view will be enhanced to support the upload of TES trades in Futures Calendar Spreads as well.

9.4 Improved handling of strategies of Order and TES entry

The *Order Entry* view and the *TES Entry* view will be enhanced regarding the entry of strategies. The model for these improvements will be the smart strategy selector known from the strategy handling in Eurex EnLight.

9.5 TES Basket trades: Enabling copy-paste entry

With T7 Release 9.0, the *TES - Basket Trade Entry* view will support the entry, amendment and modification of basket trades by copy-pasting its definition from an Excel sheet. The columns in the Excel sheet will have to be arranged in the same order as in the view. If there are already existing entries in the view (rows of basket components), then the copy-paste input will not overwrite the existing entries but will be added to them.

9.6 TES Basket trades: Further Enhancements

With T7 Release 9.0, the *TES Basket Trade Entry* view will be further enhanced. For referencing an existing basket, the user only needs to provide the basket ID. The respective bucket will not be needed anymore. With submission of a basket, the *Minimum Block Trade Sizes* are checked for each basket component, respective components will be highlighted in case the *Minimum Block Trade Size* is not met.

9.7 TES Basket trades: Renaming of Buyer/Seller labels

With T7 Release 9.0, the labels for Buyer and Seller in *TES Basket Trade Entry* view will be renamed to Counterparty 1 and Counterparty 2. The reason is that for EBBs, in contrast to BTRF, basket components can trade in different directions, buy or sell. Hence, it is not always obvious who is buying or selling. To avoid confusion, the labels will be renamed.

10. Further Changes and Enhancements

With T7 Release 9.0, Eurex will furthermore introduce the following changes and enhancements.

10.1 Eurex Improve: Trading Capacity enforcement on broker side

With T7 Release 9.0, it will be enforced that on the bank / broker side of the indication of a *Eurex Improve* trade *Agency* will not be used as the trading capacity, but either *Proprietary* or *Market Making*. If the validation fails, the corresponding *Eurex Improve* request will be rejected with an appropriate error message.

Eurex Improve is a client order flow execution facilitation service, also known as *Client Liquidity Improvement Process* (CLIP).

10.2 Eurex EnLight: Increase of delay for transfer of final deals to TES

The delay time *STPDelayDurationSRQS* by which the transfer of a final deal to TES is delayed will be increased by 10 seconds in order to have a minimum time of at least 10 seconds in any case. The delay will support a correct handling of complex instruments newly created for this deal.

10.3 Eurex EnLight: New validation for Respondent Registration

With T7 Release 9.0, it will be ensured that each Business Unit can assign only one user per product. If assignments for more than one user still exist, it will be possible to delete such assignments.

10.4 Eurex EnLight: New validations in *Working Delta* mode

Depending on the polarity (positive/negative) of the delta entered by the respondent in a quote, the hedge is determined either as *Buy* or *Sell*. The underlying limit price is entered by the requester in a HitQuote request or while updating the deal. Based on the polarity of the delta, new validations will be implemented.

In case the respondent enters or updates a new reference price, it will be validated against the underlying limit price:

- In case of a Buy hedge, the new reference price has to be less than or equal to the underlying limit price.
- In case of a Sell hedge, the new reference price has to be greater than or equal to the underlying limit price.

In case the requester changes the underlying limit price, the direction of the change will be validated:

- In case of a Buy hedge, the underlying limit price may only be increased.
- In case of a Sell hedge, the underlying limit price may only be decreased.

10.5 Eurex EnLight: Simplify ETI *Quote Entry* request

The following field will be removed from the messages *SRQSEnterQuoteRequest* and *SRQSQuoteNotification*:

- *UnderlyingPx* (810)

Trading participants can submit the underlying reference price in the *QuoteRefPice* (28759) field.

10.6 Eurex EnLight: Underlying reference price mandatory and fixed

With T7 Release 9.0, the underlying reference price in the *Open Negotiation* request will be mandatory for *Delta Exchange Outside T7* workflow where the underlying is traded outside Eurex. Additionally, the respondents will not be able to update the underlying price anymore while entering a quote.

Please note, that the requesters and respondents will still be able to negotiate on underlying Delta, Bid and Ask prices, so that the capability to negotiate the deal is not reduced in a meaningful way.

10.7 Eurex EnLight: Show last deal on closure

When initiating the RfQ, the requester will be able to set a flag to show the information about the last deal in case an automatic closure of the negotiation will be triggered, i.e. when the negotiation quantity is fully executed. Then, the last deal's price, quantity and time will be disseminated to all respondents who responded with a quote (and not with *Working* or *Decline* status).

The last deal information will not be disclosed, if the requester manually reduces the open quantity to 0, or closes the negotiation while the open quantity is greater than 0. The requester can change the *Show Last Deal on Closure* flag until the negotiation is closed.

The new flag *Show Last Deal on Closure* will be available here:

- Trader GUI, *Request details* view, *Negotiation History* view.
- ETI *Open Negotiation* request and *Open / Update negotiation* notifications.
- XML Report TE600 Eurex EnLight Maintenance

10.8 Reference Data now including Options Multiplier of OVS

Recently introduced strategies have in common that they do not contain a leg with a leg ratio of 1. This results in a more comprehensive determination of the options multiplier of OVS which – usually – can assume any value between 100 (minimum option multiplier) and 1000 (maximum option multiplier).

So far, the public reference data provided the options multiplier only implicitly as the overall leg ratio, which is the result of the leg ratio times the options multiplier.

With T7 Release 9.0, the options multiplier of OVS will be explicitly included in the public reference data:

- The options multiplier will be published in the public market data (EMDI: Complex instrument update message) and public reference data (RDI: instrument snapshot/incremental) as well as in the RDF files, when a new complex instrument is created, on the level of the complex instrument (not its legs).
- The options multiplier will be published in the public market data EOBI (Add Complex Instrument message) on creation of new complex instruments, on the level of the complex instrument (not its legs).

10.9 Auto Approval allowance in Product Information CSV files

With T7 Release 9.0, the Auto Approval allowance flag *allowAutoApproval* will be published in the TES profile CSV file as part of the Product Information CSV files available on the Eurex Web site, see

Data > Trading files > T7 Entry Service parameters

Auto Approval will be possible only for products where this flag is enabled.

10.10 Price range extension parameter in Product Information CSV files

The *price range extension parameter* for the *Default Extended Price Validation*, introduced due to MiFID II compliance, will be included into the trading parameters CSV file within the *Products and Instruments* files on the Eurex Web site, see

Data > Trading files > Product parameters files > Trading parameters

10.11 New field *liquidityClass* available in reference data

With T7 Release 9.0, a new field *liquidityClass* on Product level with valid values 1, 2, … will be introduced, and it will be reflected on series level in the public Reference Data Interface RDI.

10.12 No ISIN assignment to Complex Instruments anymore

With T7 Release 9.0, the assignment of ISINs to complex instruments will be discontinued. The respective ISIN fields in public reference data and market data interfaces and files will not be removed but left blank.

10.13 New field RoundLot available in RDI/RDF

With T7 Release 9.0, a new informational field will become available in public reference data RDI/RDF on product level:

- *RoundLot* in T7 RDI *Product Snapshot* message.

The field description will be: Minimum Tradable Unit.

10.14 New fields about underlying futures contract available in RDI

With T7 Release 9.0, new informational fields about underlying futures contracts will be available in the public reference data RDI *Instrument Snapshot* message. These fields will only be filled, if the underlying of the derivatives contract is itself a derivatives contract, traded in the same market. This means, they will only be filled for an option on a futures contract or a futures contract on a futures contract.

- *UnderlyingMarketSegmentID (31300)*: The product Id of the underlying futures contract's trading product.
- *UnderlyingSecurityID (309)*: The instrument Id of the underlying futures contract's trading instrument.
- *UnderlyingSecurityIDSource (305)*: With valid value M=Marketplace-assigned identifier.

10.15 New role User Data View w/o PIN

With T7 Release 9.0, a new role *User Data View w/o PIN* will be introduced. This role will entitle users like the existing role *User Data View*, but without the entitlement to see the PIN numbers of the users of their business unit.

10.16 Report RPTTE540 Daily Order Maintenance: Available as XML only

Starting with T7 Release 9.0, the report RPTTE540 *Daily Order Maintenance* will only be distributed in the XML format.

10.17 Change in XML Report TE540 Daily Order Maintenance

For the field *activity* a new valid value will be introduced:

- Valid Value: 7
- Decode: O
- Description: Order Book Restatement

The new valid value 7 respective O for *activity* indicates records which reflect the order book restatement of persistent orders on system startup respective on intra-day market resets.

10.18 Change in XML Report TR902 Daily Order and Quote Transactions

The report description will be changed to:

> *This report contains the aggregation of messages within the definition of Article 4(1)(40) of Directive 2014/65/EU.*
>
> *For calculation purposes, messages include the following events for orders and quotes: additions, modifications, and deletions.*
>
> *This report contains daily, month-to-date and yearly message rates per product as well as daily, month-to-date and yearly message rates of all products, for which there is a liquid market in accordance with Article 2(1)(17) of Regulation (EU) No 600/2014.*
>
> *This report is available only for derivative market*.

The name of the following tags in this report will be replaced:

- *maxRatioMarketDate* will become *maxRatioSingleDate*.
- *maxRatioMarketMtd* will become *maxRatioSingleMtd*.
- *maxRatioMarket12M* will become *maxRatioSingle12M*.

And the descriptions of these tags will be replaced by the following:

- *maxRatioSingleDate*: This field contains the max value per product of the daily report defined as NoTransactionsDate / NoSecDate.
- *maxRatioSingleMtd*: This field contains the max value per product of the daily report defined as NoTransactionsMTD / NoSecMTD.
- *maxRatioSingle12M*: This field contains the max value per product (for Derivatives Market) of the daily report defined as Transactions12M / TradingSec12M.

10.19 Change in XML Reports TR160 and TR165

The report structure of TR160 *Identifier Mapping Error* and TR165 *DMA Error Report* will be modified to reflect not only orders but also TES trades. In both reports the field *exchangeOrderId* will be replaced by the field *transactionIdentifier*. The field will either contain the order ID of an on-exchange order, or the TES ID of a TES trade, or a predefined valid value if none of both relations exist. The field *typOrig* serves to distinguish both usages of the field and will be omitted if it is neither nor.

In report TR160 there will be an additional field *shortCodeSrc*. For the short codes, which resulted in error description "1 - Client long value is missing", the information will be provided from which field the short code stems from: Either *ClientID*, or *ExecutionID*, or *InvestmentID*.

10.20 Change in XML Reports TE600, TE610, TE810

Since the Eurex EnLight STP workflow has become mandatory with T7 Release 8.1, the field *stpFlg* will be removed from these reports.

10.21 Report changes concerning Market Makers

With T7 Release 9.0, the following Market Maker reports will be decomissioned:

- TD940 – Daily Trade Statistics
- TD941 – Daily Regular Market Making Quote Request Performance
- TD942 – Daily Advanced Market Making Quote Request Performance
- TD945 – MTD Regular Market Making Quote Request Performance
- TD946 – MTD Basis Building Block Liquidity Provider Quote Request Performance
- TD947 – MTD Advance Market Making Quote Request Performance
- TD959 – Designated Market Making Measurement

A new Market Maker report will be introduced:

- TD981 -- Special Market Making Report.

For details see the XML Report Manual.

In existing report TD983 Regulatory Market Making MTD there will be a new field:

- Name: rmmAdmittInd
- Format: alphanumeric 3
- Description: This field indicates whether the Participant ID is admitted as Regulated Market Maker according to Eurex Exchange Rules (par. 52).

10.22 Removal of Order Book Count Limits risk protection

With T7 Release 9.0, the risk protection *Order Book Count Limits* will be removed which allowed a trading participant to restrict the number of orders and quotes per product, that a specific business unit or session may have in the order book at any time.

The risk protection *Order Book Count Limits* shall not be confused with the risk protection *Pre-Trade Risk Quantity Limits*. Participants are advised to apply the risk protection *Pre-Trade Risk Quantity Limits* instead of *Order Book Count Limits.*

10.22.1 Impact on Interfaces

The following chapter outlines the changes to interfaces to support the functionality. The changes are described in a general fashion to provide an indication of the upcoming amendments. For detailed changes, please refer to the upcoming interface manuals and to the *Online Help* in the GUIs.

10.22.1.1 ETI

The following error codes will be removed from the list of valid values for *SessionRejectReason* (373):

- 10004 Pre-trade risk limit for open orders on Business Unit level exceeded
- 10005 Pre-trade risk limit for open orders on session level exceeded

10.22.1.2 Admin GUI

The *Order Book Count Limits* view will be removed.

10.22.1.3 XML Reports

The following reports will be discontinued:

- RD140 Order Book Count Limits Maintenance - Trading Participant
- RD145 Order Book Count Limits Status - Trading Participant
- RD155 Order Book Count Limit Status - Clearing Participant

10.23 EFS Trade – New mandatory Field: Swap Clearer

With T7 Release 9.0, the field *Swap Clearer* must be populated when entering an EFS TES trade request. The field differentiates whether the swap has been cleared at Eurex Clearing (ECAG) or somewhere else (Non-ECAG).

In ETI, the new field *SwapClearer* (25199) will be introduced to the following messsages:

- *EnterTESTradeRequest* (10600)
- *ModifyTESTradeRequest* (10601)
- *TESBroadcast* (10604)

The new field *swapClearer* will also be introduced in XML report TE545 Daily TES Mainenance.

11. Change log

No	Date	Log entry
1.2	04 September 2020	First published version.
1.3	21 September 2020	Correction of document paths on Eurex Web site.
1.4	25 September 2020	New mandatory field for EFS trades: *Swap Clearer*. Correction of valid values in XML reports for *Electronic Processing of TES Reversals Requests*. Introduction of Change log.
1.5	20 October 2020	Clarification concerning the *Backward Compatibility Mode* according to the published ETI manual, in chapters 1.1 (*Note on Interfaces*), 4.2.1, 7.2.1.